

# ABSTRACT OF THE DISCLOSURE

The present invention relates to methods of inducing ovulation in a female host comprising the administration of a non-polypeptide cyclic adenosine monophosphate (cAMP) level modulator to the female host. In another aspect, the invention provides for specific administration of the phosphodiesterase inhibitor prior to the luteal phase of the host's ovulatory cycle. Preferred non-polypeptide cAMP level modulator include phosphodiesterase inhibitors, particularly inhibitors of phosphodiesterase 4 isoforms.